

AMENDMENTS TO THE CLAIMS

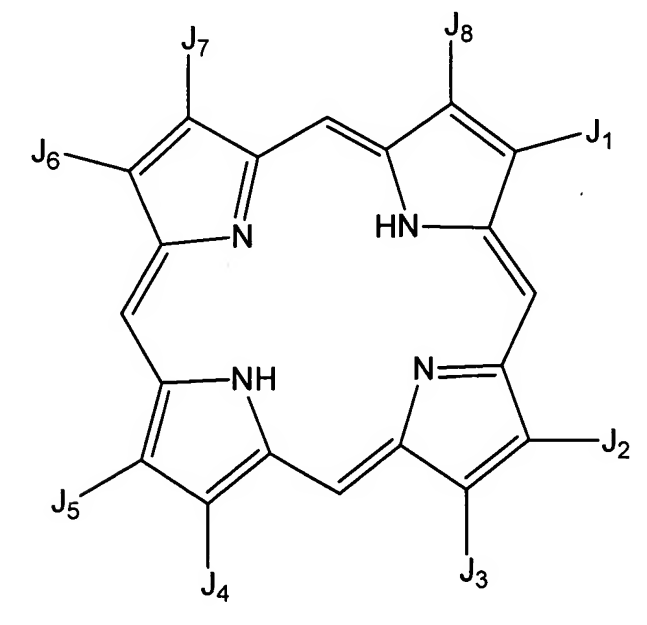
This listing of claims will replace all prior listings and versions of claims in the application.

Claim 1 (canceled)

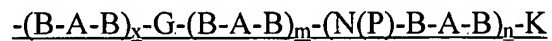
Claim 2 (canceled)

Claim 3 (canceled)

Claim 4 (currently amended) ~~The composition of claim 2,~~
A composition comprising a compound according to the formula



wherein at least one of J₁, J₂, J₃, J₄, J₅, J₆, J₇ and J₈ is independently M, where each M is independently selected from the group consisting of



wherein each A is independently selected from the group consisting of: a nonentity, C₁-C₁₂ alkyl, C₂-C₁₂ alkenyl, C₂-C₁₂ alkynyl, C₃-C₁₂ cycloalkyl, C₃-C₈ cycloaryl, C₃-C₁₂ cycloalkenyl, C₃-C₁₂ cycloalkynyl, C₁-C₁₂ alkanol, C₃-C₁₂ cycloalkanol, and C₃-C₈ hydroxyaryl;

each B is independently selected from the group consisting of: a nonentity, C₁-C₁₂ alkyl, C₂-C₁₂ alkenyl, C₂-C₁₂ alkynyl, C₃-C₁₂ cycloalkyl, C₃-C₈ cycloaryl, C₃-C₁₂ cycloalkenyl, C₃-C₁₂ cycloalkynyl, C₁-C₁₂ alkanol, C₃-C₁₂ cycloalkanol, and C₃-C₈ hydroxyaryl;

and with the proviso that each -B-A-B- unit contain at least one carbon atom;

wherein G is independently selected from the group consisting of -N(P)-, -(C=O)-N(P)-, -N(P)-(C=O)-, and a nonentity;

x is independently 0 or 1;

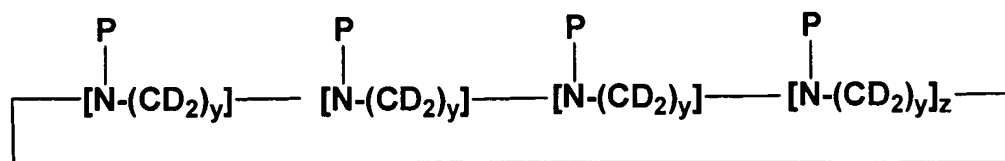
m is independently 0 or 1;

n is independently an integer from 0 to 20;

each P is independently selected from the group consisting of H and C₁-C₁₂ alkyl;

each K is independently selected from the group consisting of H, C₁-C₁₂ alkyl, C₂-C₁₂ alkenyl, C₂-C₁₂ alkynyl, C₃-C₁₂ cycloalkyl, C₃-C₈ cycloaryl, C₃-C₁₂ cycloalkenyl, C₃-C₁₂ cycloalkynyl, C₁-C₁₂ alkanol, C₃-C₁₂ cycloalkanol, and C₃-C₈ hydroxyaryl, and Q;

where each Q is independently selected from the group consisting of



where each P is independently selected from the group consisting of H and C₁-C₁₂ alkyl, each D is selected from the group consisting of H and C₁-C₃₂ alkyl, y is an integer from 1 to 8, and z is an integer from 0 to 5, and where the Q moiety is attached to the remainder of the molecule at any C or N atom in the Q moiety (including C atoms in the D or P moieties) by removing a hydrogen atom, a P substituent, or a D substituent of the Q moiety to form an open valence for attachment to the remainder of the molecule;

and where the remaining members or member of J₁, J₂, J₃, J₄, J₅, J₆, J₇ and J₈ are each independently selected from the group consisting of H, -B-A-B, -COOH, -SO₃H, -B-A-B-COOH, or -B-A-B-SO₃H, where each A and each B are independently selected as defined above and with the proviso that each -B-A-B- unit has at least one carbon atom;

with the proviso that M excludes moieties of the form

-K₁-G₅-L₅-(N(P₅)-A₅)_n-K₂

where K₁ is independently selected from the group consisting of C₁-C₈ alkyl and where the valence to the left of K₁ attaches to the porphyrin ring;

G₅ is -O-, -(C=O)-, -C(=O)-O-, -O-(C=O)-, -O-(C=O)-O-, -O-(C=O)-N-, -N-(C=O)-O-, or a nonentity;

L₅ is C₁-C₈ alkyl, C₃-C₈ cycloalkyl, C₃-C₈ cycloaryl, C₁-C₈ alkoxy, C₁-C₈ alkyl-C₃-C₈ cycloalkyl, C₁-C₈ alkyl-C₃-C₈ cycloaryl, C₁-C₈ alkoxy-C₃-C₈ cycloaryl, C₃-C₈ cycloalkyl-C₃-C₈ cycloaryl, C₃-C₈ cycloalkyl-C₁-C₈ alkyl, C₃-C₈ cycloaryl-C₁-C₈ alkyl, C₃-C₈ cycloaryl-C₁-C₈ alkoxy, C₃-C₈ cycloaryl-C₃-C₈ cycloalkyl, or a nonentity;

each A₅ is independently selected from the group consisting of C₁-C₈ alkyl, C₂-C₈ alkenyl, C₂-C₈ alkynyl, C₃-C₈ cycloalkyl, C₃-C₈ cycloaryl, C₃-C₈ cycloalkenyl, and C₃-C₈ cycloalkynyl;

P₅ is selected from the group consisting of H and C₁-C₈ alkyl;

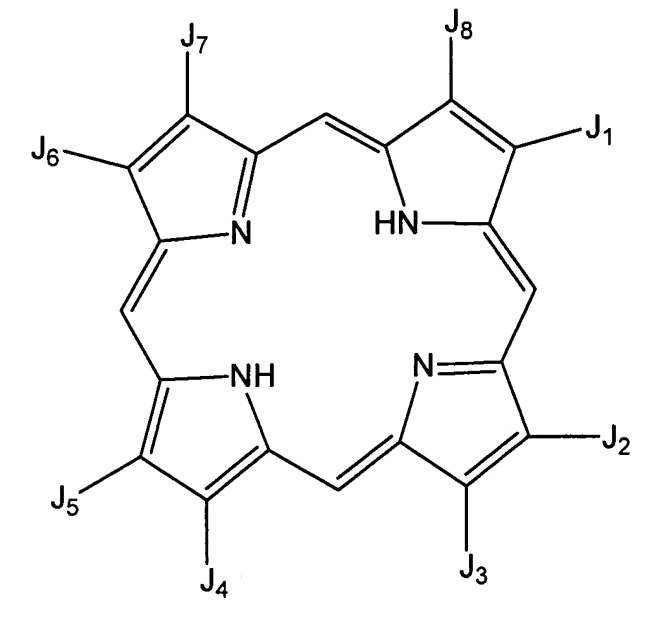
n is an integer from 2 to 8;

and K₂ is independently selected from the group consisting of H, C₁-C₈ alkyl, C₂-C₈ alkenyl, C₂-C₈ alkynyl, C₃-C₈ cycloalkyl, C₃-C₈ cycloaryl, C₃-C₈ cycloalkenyl, C₃-C₈ cycloalkynyl, C₁-C₈ alkanol, C₃-C₈ cycloalkanol, and C₃-C₈ hydroxyaryl;

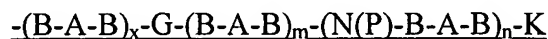
wherein at least one K is Q, and where the Q moiety is attached to the remainder of the molecule at any N atom in the Q moiety by removing a P substituent of the Q moiety to form an open valence for attachment to the remainder of the molecule.

Claim 5 (canceled)

Claim 6 (currently amended) ~~The composition of claim 2,~~
A composition comprising a compound according to the formula



wherein at least one of J₁, J₂, J₃, J₄, J₅, J₆, J₇ and J₈ is independently M, where each M is independently selected from the group consisting of



wherein each A is independently selected from the group consisting of: a nonentity, C₁-C₁₂ alkyl, C₂-C₁₂ alkenyl, C₂-C₁₂ alkynyl, C₃-C₁₂ cycloalkyl, C₃-C₈ cycloaryl, C₃-C₁₂ cycloalkenyl, C₃-C₁₂ cycloalkynyl, C₁-C₁₂ alkanol, C₃-C₁₂ cycloalkanol, and C₃-C₈ hydroxyaryl;

each B is independently selected from the group consisting of: a nonentity, C₁-C₁₂ alkyl, C₂-C₁₂ alkenyl, C₂-C₁₂ alkynyl, C₃-C₁₂ cycloalkyl, C₃-C₈ cycloaryl, C₃-C₁₂ cycloalkenyl, C₃-C₁₂ cycloalkynyl, C₁-C₁₂ alkanol, C₃-C₁₂ cycloalkanol, and C₃-C₈ hydroxyaryl;

and with the proviso that each -B-A-B- unit contain at least one carbon atom;

wherein G is independently selected from the group consisting of -N(P)-, -(C=O)-N(P)-, -N(P)-(C=O)-, and a nonentity;

x is independently 0 or 1;

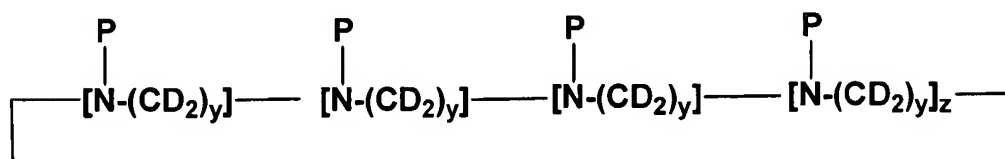
m is independently 0 or 1;

n is independently an integer from 0 to 20;

each P is independently selected from the group consisting of H and C₁-C₁₂ alkyl;

each K is independently selected from the group consisting of H, C₁-C₁₂ alkyl, C₂-C₁₂ alkenyl, C₂-C₁₂ alkynyl, C₃-C₁₂ cycloalkyl, C₃-C₈ cycloaryl, C₃-C₁₂ cycloalkenyl, C₃-C₁₂ cycloalkynyl, C₁-C₁₂ alkanol, C₃-C₁₂ cycloalkanol, and C₃-C₈ hydroxyaryl, and Q;

where each Q is independently selected from the group consisting of



where each P is independently selected from the group consisting of H and C₁-C₁₂ alkyl, each D is selected from the group consisting of H and C₁-C₃₂ alkyl, y is an integer from 1 to 8, and z is an integer from 0 to 5, and where the Q moiety is attached to the remainder of the molecule at any C or N atom in the Q moiety (including C atoms in the D or P moieties) by removing a hydrogen atom, a P substituent, or a D substituent of the Q moiety to form an open valence for attachment to the remainder of the molecule;

and where the remaining members or member of J₁, J₂, J₃, J₄, J₅, J₆, J₇ and J₈ are each independently selected from the group consisting of H, -B-A-B, -COOH, -SO₃H, -B-A-B-COOH, or -B-A-B-SO₃H, where each A and each B are independently selected as defined above and with the proviso that each -B-A-B- unit has at least one carbon atom;

with the proviso that M excludes moieties of the form



where K₁ is independently selected from the group consisting of C₁-C₈ alkyl and where the valence to the left of K₁ attaches to the porphyrin ring;

G₅ is -O-, -(C=O)-, -C(=O)-O-, -O-(C=O)-, -O-(C=O)-O-, -O-(C=O)-N-, -N-(C=O)-O-, or a nonentity;

L₅ is C₁-C₈ alkyl, C₃-C₈ cycloalkyl, C₃-C₈ cycloaryl, C₁-C₈ alkoxy, C₁-C₈ alkyl-C₃-C₈ cycloalkyl, C₁-C₈ alkyl-C₃-C₈ cycloaryl, C₁-C₈ alkoxy-C₃-C₈ cycloaryl, C₃-C₈ cycloalkyl-C₃-C₈ cycloaryl, C₃-C₈ cycloalkyl-C₁-C₈ alkyl, C₃-C₈ cycloaryl-C₁-C₈ alkyl, C₃-C₈ cycloaryl-C₁-C₈ alkoxy, C₃-C₈ cycloaryl-C₃-C₈ cycloalkyl, or a nonentity;

each A₅ is independently selected from the group consisting of C₁-C₈ alkyl, C₂-C₈ alkenyl, C₂-C₈ alkynyl, C₃-C₈ cycloalkyl, C₃-C₈ cycloaryl, C₃-C₈ cycloalkenyl, and C₃-C₈ cycloalkynyl;

P₅ is selected from the group consisting of H and C₁-C₈ alkyl;

n is an integer from 2 to 8;

and K₂ is independently selected from the group consisting of H, C₁-C₈ alkyl, C₂-C₈ alkenyl, C₂-C₈ alkynyl, C₃-C₈ cycloalkyl, C₃-C₈ cycloaryl, C₃-C₈ cycloalkenyl, C₃-C₈ cycloalkynyl, C₁-C₈ alkanol, C₃-C₈ cycloalkanol, and C₃-C₈ hydroxyaryl;

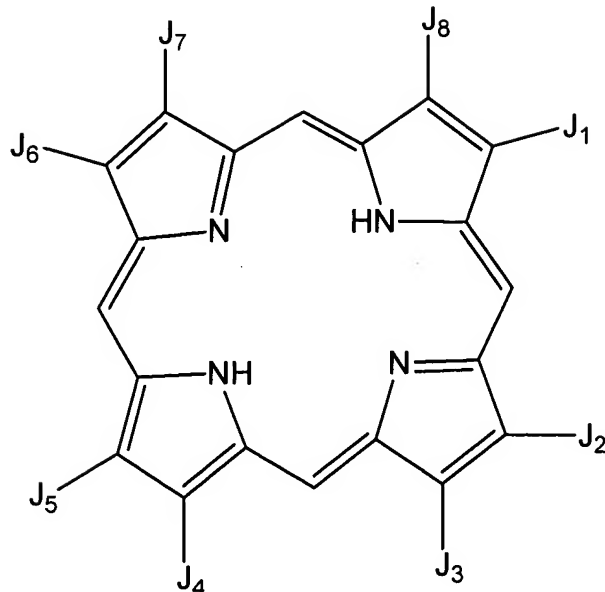
wherein at least one A substituent comprises a cyclopropane cyclopropyl group.

Claim 7 (canceled)

Claim 8 (canceled)

Claim 9 (currently amended) ~~The composition of claim 8,~~

A composition comprising a compound of the formula



where J_1 and J_2 are independently M and each M is independently selected from the group consisting of $-(B-A-B)-G-(B-A-B)-(N(P)-B-A-B)_n-K$;

J_3, J_4, J_6 and J_8 are independently selected from methyl and ethyl; and

J_5 and J_7 are independently selected from methyl, ethyl, and $-SO_3H$;

The composition of claim 8;

wherein at least one B-A-B unit comprises a cycloalkyl moiety.

Claim 10 (original) The composition of claim 9, wherein at least one B-A-B unit comprises a cyclopropyl moiety.

Claim 11 (canceled)

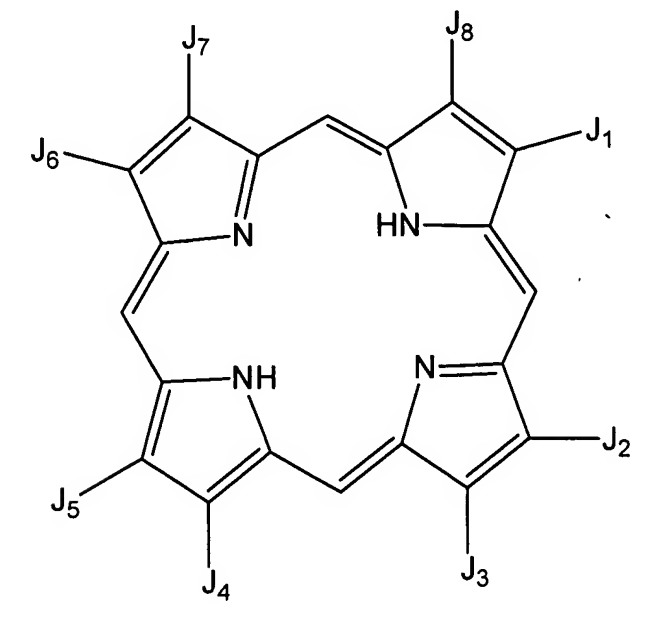
Claim 12 (canceled)

Claim 13 (canceled)

Claim 14 (original) The composition of claim 10, where J_1 and J_2 are identical.

Claim 15 (canceled)

Claim 16 (currently amended) ~~The composition of claim 1,~~
A composition comprising a compound according to the formula



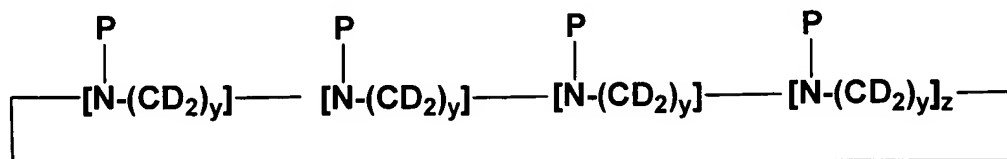
wherein at least one of J₁, J₂, J₃, J₄, J₅, J₆, J₇ and J₈ is independently selected from the group consisting of



wherein each A is independently selected from the group consisting of: a nonentity, C₁-C₁₂ alkyl, C₂-C₁₂ alkenyl, C₂-C₁₂ alkynyl, C₃-C₁₂ cycloalkyl, C₃-C₈ cycloaryl, C₃-C₁₂ cycloalkenyl, C₃-C₁₂ cycloalkynyl, C₁-C₁₂ alkanol, C₃-C₁₂ cycloalkanol, and C₃-C₈ hydroxyaryl;

each B is independently selected from the group consisting of: a nonentity, C₁-C₁₂ alkyl, C₂-C₁₂ alkenyl, C₂-C₁₂ alkynyl, C₃-C₁₂ cycloalkyl, C₃-C₈ cycloaryl, C₃-C₁₂ cycloalkenyl, C₃-C₁₂ cycloalkynyl, C₁-C₁₂ alkanol, C₃-C₁₂ cycloalkanol, and C₃-C₈ hydroxyaryl;

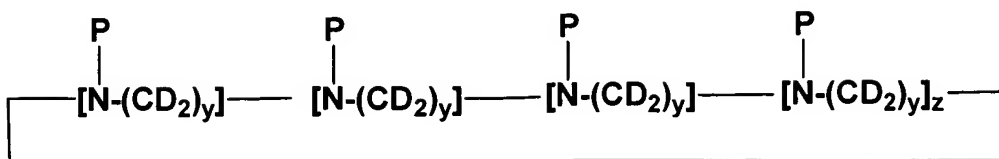
and with the proviso that each -B-A-B- unit contain at least one carbon atom;
wherein G is independently selected from the group consisting of -N(P)-, -(C=O)-N(P)-, -N(P)-(C=O)-, and a nonentity;
x is independently 0 or 1;
m is independently 0 or 1;
n is independently an integer from 0 to 20;
each P is independently selected from the group consisting of H and C₁-C₁₂ alkyl;
each K is independently selected from the group consisting of H, C₁-C₁₂ alkyl, C₂-C₁₂ alkenyl, C₂-C₁₂ alkynyl, C₃-C₁₂ cycloalkyl, C₃-C₈ cycloaryl, C₃-C₁₂ cycloalkenyl, C₃-C₁₂ cycloalkynyl, C₁-C₁₂ alkanol, C₃-C₁₂ cycloalkanol, and C₃-C₈ hydroxyaryl, and Q;
where each Q is independently selected from the group consisting of



where each P is independently selected from the group consisting of H and C₁-C₁₂ alkyl, each D is selected from the group consisting of H and C₁-C₃₂ alkyl, y is an integer from 1 to 8, and z is an integer from 0 to 5, and where the Q moiety is attached to the remainder of the molecule at any C or N atom in the Q moiety (including C atoms in the D or P moieties) by removing a hydrogen atom, a P substituent, or a D substituent of the Q moiety to form an open valence for attachment to the remainder of the molecule;

and where the remaining members or member of J₁, J₂, J₃, J₄, J₅, J₆, J₇ and J₈ are each independently selected from the group consisting of H, -B-A-B-, -COOH, -SO₃H, -B-A-B-COOH, or -B-A-B-SO₃H, where each A and each B are independently selected as defined above and with the proviso that each -B-A-B- unit has at least one carbon atom
wherein each -K is independently Q;

where each Q is independently selected from the group consisting of

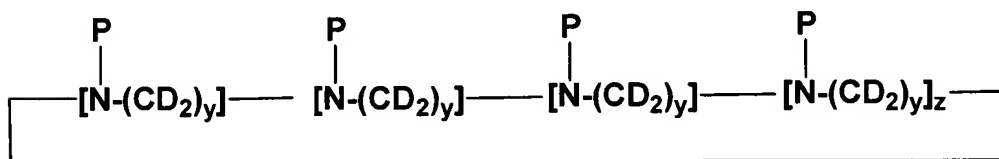


wherein only one D moiety is selected from the group consisting of C₁-C₃₂ alkyl and all remaining D moieties are H; wherein three P groups are selected from the group consisting of -H and -CH₃; wherein the fourth P group is absent and the Q moiety is attached to the remainder of the molecule at that valence; and wherein y is 2, 3, or 4 and z is 0, 1, or 2.

Claim 17 (currently amended) The composition of claim 2 4, wherein each -K is independently

Q;

where each Q is independently selected from the group consisting of

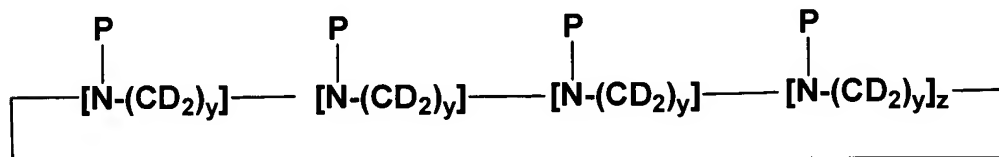


wherein only one D moiety is selected from the group consisting of C₁-C₃₂ alkyl and all remaining D moieties are H; wherein three P groups are selected from the group consisting of -H and -CH₃; wherein the fourth P group is absent and the Q moiety is attached to the remainder of the molecule at that valence; and wherein y is 2, 3, or 4 and z is 0, 1, or 2.

Claim 18 (currently amended) The composition of claim 6 4, wherein each -K is independently

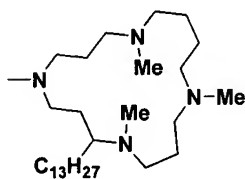
Q;

where each Q is independently selected from the group consisting of

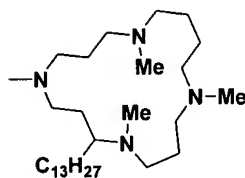


wherein only one D moiety is selected from the group consisting of C₁-C₃₂ alkyl and all remaining D moieties are H; wherein three P groups are selected from the group consisting of -H and -CH₃; wherein the fourth P group is absent and the Q moiety is attached to the remainder of the molecule at that valence; and wherein y is 2, 3, or 4 and z is 0, 1, or 2.

Claim 19 (currently amended) The composition of claim 4 16, wherein -K is



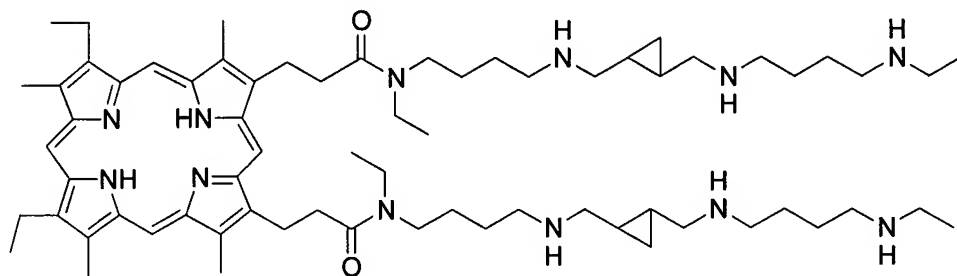
Claim 20 (currently amended) The composition of claim 2 4, wherein -K is



Claim 21 (new) The composition of claim 4, further comprising a pharmaceutically acceptable carrier.

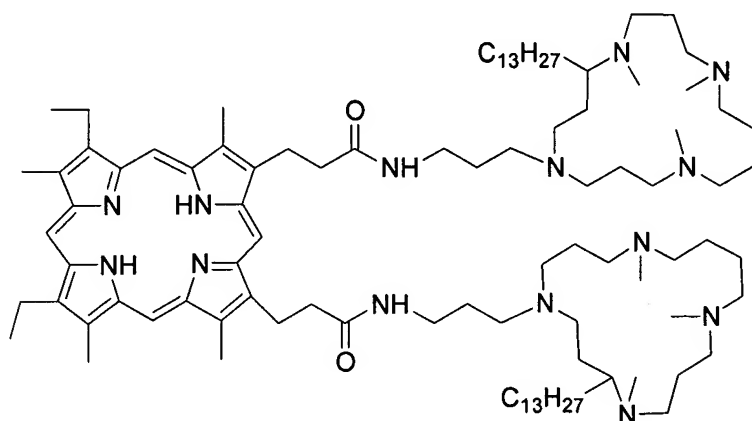
Claim 22 (new) The composition of claim 6, further comprising a pharmaceutically acceptable carrier.

Claim 23 (new) The composition according to claim 6 wherein the compound is



and all salts thereof.

Claim 24 (new) The composition according to claim 20, wherein the compound is



and all salts thereof.

Claim 25 (new) The composition of claim 23, further comprising a pharmaceutically acceptable carrier.

Claim 26 (new) The composition of claim 24, further comprising a pharmaceutically acceptable carrier.